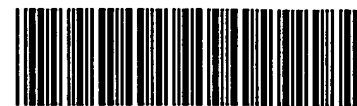


RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number: 10/619,685A
Source: IFW/6
Date Processed by STIC: 07-19-2005

ENTERED



IFW16

RAW SEQUENCE LISTING

DATE: 07/19/2005

PATENT APPLICATION: US/10/619,685A

TIME: 11:06:22

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Output Set: N:\CRF4\07192005\J619685A.raw

3 <110> APPLICANT: National Institute of Agrobiological Resources, Ministry of Agriculture,

4 Forestry and Fisheries

5 Japan Science and Technology Corporation

7 <120> TITLE OF INVENTION: A NOVEL GENE FOR CONTROLLING LEAF SHAPES

W--> 9 <130> FILE REFERENCE:

C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/619,685A

C--> 12 <141> CURRENT FILING DATE: 2003-07-15

14 <160> NUMBER OF SEQ ID NOS: 15

16 <170> SOFTWARE: PatentIn Ver. 2.1

18 <210> SEQ ID NO: 1

19 <211> LENGTH: 2468

20 <212> TYPE: DNA

21 <213> ORGANISM: Oryza sativa

23 <220> FEATURE:

24 <221> NAME/KEY: CDS

25 <222> LOCATION: (198)..(2270)

27 <300> PUBLICATION INFORMATION:

29 <400> SEQUENCE: 1

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34 gccgccccgt ctgcctctcc ccgctcgacg agaccgcgcc gaggcgcgaa gaggcctagt 180
36 gttcttcgca cctcgcg atg agt agc gcg gtg aag gac cag ctt cac cag 230
37 Met Ser Ser Ala Val Lys Asp Gln Leu His Gln
38 1 5 10
40 atg tcg acg aca tgc gat tcg ctt cta ctg gag ctc aat gtg att tgg 278
41 Met Ser Thr Thr Cys Asp Ser Leu Leu Glu Leu Asn Val Ile Trp
42 15 20 25
44 gat gag gtc ggt gag ccc gac acg acg agg gac agg atg ctg ctg gag 326
45 Asp Glu Val Gly Glu Pro Asp Thr Thr Arg Asp Arg Met Leu Leu Glu
46 30 35 40
49 ctc gag cag gag tgc ctg gag gtc tac agg cgg aag gtc gac cag gcg 374
50 Leu Glu Gln Glu Cys Leu Glu Val Tyr Arg Arg Lys Val Asp Gln Ala
51 45 50 55
53 aac cgg agc cgc gcc cag ctg cgg aag gcc atc gcc gag ggc gag gca 422
54 Asn Arg Ser Arg Ala Gln Leu Arg Lys Ala Ile Ala Glu Gly Glu Ala
55 60 65 70 75
59 gag ctc gcc ggc atc tgc tca gcc atg ggc gag ccg ccc gtg cac gtt 470
60 Glu Leu Ala Gly Ile Cys Ser Ala Met Gly Glu Pro Pro Val His Val
61 80 85 90
63 aga cag tca aat cag aag ctt cat ggc tta aga gag gag ttg aat gca 518
64 Arg Gln Ser Asn Gln Lys Leu His Gly Leu Arg Glu Glu Leu Asn Ala
65 95 100 105
67 att gtt ccg tat ttg gaa gaa atg aaa aag aaa aag gtc gaa cga tgg 566

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TIME: 11:06:22

Input Set : A:\Yam20052.txt

Output Set: N:\CRF4\07192005\J619685A.raw

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72 Asn Gln Phe Val His Val Ile Glu Gln Ile Lys Lys Ile Ser Ser Glu
73      125      130      135
75 ata agg cca gcc gat ttt gtt ccc ttt aaa gtt ccg gtt gat cag tct 662
76 Ile Arg Pro Ala Asp Phe Val Pro Phe Lys Val Pro Val Asp Gln Ser
77 140      145      150      155
79 gac ctg tca tta aga aag ctt gat gag ttg acg aag gac ctg gaa tcc 710
80 Asp Leu Ser Leu Arg Lys Leu Asp Glu Leu Thr Lys Asp Leu Glu Ser
81      160      165      170
83 ctt cag aag gag aag agc gat cgg cta aag caa gtg ata gaa cat ttg 758
84 Leu Gln Lys Glu Lys Ser Asp Arg Leu Lys Gln Val Ile Glu His Leu
85      175      180      185
87 aat tct ttg cat tcc tta tgt gag gtg ctt ggc ata gat ttc aag caa 806
88 Asn Ser Leu His Ser Leu Cys Glu Val Leu Gly Ile Asp Phe Lys Gln
89      190      195      200
91 aca gta tat gag gtg cac cct agc ttg gac gaa gct gaa gga tca aag 854
92 Thr Val Tyr Glu Val His Pro Ser Leu Asp Glu Ala Glu Gly Ser Lys
93      205      210      215
95 aac ctg agc aac act aca att gag agg ctt gct gct gcc gca aac aga 902
96 Asn Leu Ser Asn Thr Thr Ile Glu Arg Leu Ala Ala Ala Ala Asn Arg
97 220      225      230      235
99 ctg cgt gaa atg aag atc caa agg atg caa aag ctt caa gat ttt gct 950
100 Leu Arg Glu Met Lys Ile Gln Arg Met Gln Lys Leu Gln Asp Phe Ala
101      240      245      250
103 tct agc atg ctc gag cta tgg aat ctc atg gat act cca ctt gaa gag 998
104 Ser Ser Met Leu Glu Leu Trp Asn Leu Met Asp Thr Pro Leu Glu Glu
105      255      260      265
107 cag cag atg ttt cag aat ata aca tgc aat att gct gct tca gaa caa 1046
108 Gln Gln Met Phe Gln Asn Ile Thr Cys Asn Ile Ala Ala Ser Glu Gln
109      270      275      280
111 gag ata act gaa cca aac acc ctc tcc aca gat ttc ctg aat tat gtc 1094
112 Glu Ile Thr Glu Pro Asn Thr Leu Ser Thr Asp Phe Leu Asn Tyr Val
113      285      290      295
117 gaa tct gag gtg tta agg ctt gaa caa ctg aaa gca agt aag atg aaa 1142
118 Glu Ser Glu Val Leu Arg Leu Glu Gln Leu Lys Ala Ser Lys Met Lys
119 300      305      310      315
121 gat ctt gtt tta aaa aag aaa gca gaa cta gaa gag cat aga aga cgt 1190
122 Asp Leu Val Leu Lys Lys Lys Ala Glu Leu Glu Glu His Arg Arg Arg
123      320      325      330
125 gct cat ctt gtt ggc gag gaa ggt tat gca gag gag ttt agc att gaa 1238
126 Ala His Leu Val Gly Glu Glu Gly Tyr Ala Glu Glu Phe Ser Ile Glu
127      335      340      345
129 gct att gaa gct gga gct att gat ccc tca cta gta ctt gaa caa att 1286
130 Ala Ile Glu Ala Gly Ala Ile Asp Pro Ser Leu Val Leu Glu Gln Ile
131      350      355      360
133 gaa gct cac att gca aca gtg aaa gag gaa gct ttt agc cgg aag gat 1334
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Input Set : A:\Yam20052.txt

Output Set: N:\CRF4\07192005\J619685A.raw

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| 137 | att ctt gag aaa gtt gaa aga tgg caa aat gct tgt gaa gag gaa gcc | 1382 | | |
| 138 | Ile Leu Glu Lys Val Glu Arg Trp Gln Asn Ala Cys Glu Glu Glu Ala | | | |
| 139 | 380 385 390 395 | | | |
| 141 | tgg ctg gaa gat tac aac aaa gat gat aat cgt tac aat gct ggg agg | 1430 | | |
| 142 | Trp Leu Glu Asp Tyr Asn Lys Asp Asp Asn Arg Tyr Asn Ala Gly Arg | | | |
| 143 | 400 405 410 | | | |
| 145 | gga gca cat cta aca cta aag agg gct gaa aag gct cgt act ttg gtc | 1478 | | |
| 146 | Gly Ala His Leu Thr Leu Lys Arg Ala Glu Lys Ala Arg Thr Leu Val | | | |
| 147 | 415 420 425 | | | |
| 149 | aac aag att cct gga atg gta gat gtt ttg aga aca aaa att gct gca | 1526 | | |
| 150 | Asn Lys Ile Pro Gly Met Val Asp Val Leu Arg Thr Lys Ile Ala Ala | | | |
| 151 | 430 435 440 | | | |
| 153 | tgg aaa aat gaa cga gga aag gag gat ttc aca tat gat ggt gtt agc | 1574 | | |
| 154 | Trp Lys Asn Glu Arg Gly Lys Glu Asp Phe Thr Tyr Asp Gly Val Ser | | | |
| 155 | 445 450 455 | | | |
| 157 | ctt tcg tca atg ctt gat gaa tat atg ttc gtt cgt cag gag aaa gag | 1622 | | |
| 158 | Leu Ser Ser Met Leu Asp Glu Tyr Met Phe Val Arg Gln Glu Lys Glu | | | |
| 159 | 460 465 470 475 | | | |
| 161 | caa gag aag aag aga caa agg gat cag aag aag ctc cag gat cag ctc | 1670 | | |
| 162 | Gln Glu Lys Lys Arg Gln Arg Asp Gln Lys Lys Leu Gln Asp Gln Leu | | | |
| 163 | 480 485 490 | | | |
| 165 | aaa gcg gag cag gaa gct ttg tac gga tca aaa ccc agt cca tcc aag | 1718 | | |
| 166 | Lys Ala Glu Gln Glu Ala Leu Tyr Gly Ser Lys Pro Ser Pro Ser Lys | | | |
| 167 | 495 500 505 | | | |
| 169 | ccc cta agt aca aag aag gca cct agg cac tct atg ggt ggt gca aac | 1766 | | |
| 170 | Pro Leu Ser Thr Lys Lys Ala Pro Arg His Ser Met Gly Gly Ala Asn | | | |
| 171 | 510 515 520 | | | |
| 175 | cga agg cta tct ctt ggt gga gcc acc atg caa ccc ccg aag act gat | 1814 | | |
| 176 | Arg Arg Leu Ser Leu Gly Gly Ala Thr Met Gln Pro Pro Lys Thr Asp | | | |
| 177 | 525 530 535 | | | |
| 179 | ata ctg cat tca aag tct gtt cgt gct gcc aag aaa act gaa gaa atc | 1862 | | |
| 180 | Ile Leu His Ser Lys Ser Val Arg Ala Ala Lys Lys Thr Glu Glu Ile | | | |
| 181 | 540 545 550 555 | | | |
| 183 | ggc act ttg tcc cct agt agt aga ggt ttg gac att gcc gga ttg | 1910 | | |
| 184 | Gly Thr Leu Ser Pro Ser Ser Ser Arg Gly Leu Asp Ile Ala Gly Leu | | | |
| 185 | 560 565 570 | | | |
| 187 | cct atc aag aag ttg tct ttc aat gcc agt act cta cgt gag acg gag | 1958 | | |
| 188 | Pro Ile Lys Lys Leu Ser Phe Asn Ala Ser Thr Leu Arg Glu Thr Glu | | | |
| 189 | 575 580 585 | | | |
| 191 | aca cct cgt aaa cct ttt gct cag atc aca cca gga aac agt gtc tcg | 2006 | | |
| 192 | Thr Pro Arg Lys Pro Phe Ala Gln Ile Thr Pro Gly Asn Ser Val Ser | | | |
| 193 | 590 595 600 | | | |
| 195 | tcg acg cct gtg cgc cct atc acc aat aac act gag gat gat gag aac | 2054 | | |
| 196 | Ser Thr Pro Val Arg Pro Ile Thr Asn Asn Thr Glu Asp Asp Glu Asn | | | |
| 197 | 605 610 615 | | | |
| 199 | agg act ccg aag aca ttt aca gca ctg aat ccc aag act ccg atg act | 2102 | | |
| 200 | Arg Thr Pro Lys Thr Phe Thr Ala Leu Asn Pro Lys Thr Pro Met Thr | | | |
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RAW SEQUENCE LISTING

DATE: 07/19/2005

PATENT APPLICATION: US/10/619,685A

TIME: 11:06:22

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Output Set: N:\CRF4\07192005\J619685A.raw

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207 gtt tca gca act cca gtt tcc ctt gtt tac gac aag cca gag gta aca      2198
208 Val Ser Ala Thr Pro Val Ser Leu Val Tyr Asp Lys Pro Glu Val Thr
209          655          660          665
211 ttg cag gag gac atc gac tac tcc ttt gaa gaa agg cgg ctc gcc atc      2246
212 Leu Gln Glu Asp Ile Asp Tyr Ser Phe Glu Glu Arg Arg Leu Ala Ile
213          670          675          680
215 tat ctg gcc agg caa atg gtt taa ctgttgatca atttatgtac gtagttgaaa      2300
216 Tyr Leu Ala Arg Gln Met Val
217          685          690
219 tctgactgca ttttcttgct ggtggccatt gcgtatgttg gtcaacaata gtcggccttt      2360
221 ccagtagcac tattctgatt tactgcaatt gttttaatgt tttctacaac cagtaaaaca      2420
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234          20          25          30
235 Pro Asp Thr Thr Arg Asp Arg Met Leu Leu Glu Leu Glu Gln Glu Cys
236          35          40          45
237 Leu Glu Val Tyr Arg Arg Lys Val Asp Gln Ala Asn Arg Ser Arg Ala
238          50          55          60
239 Gln Leu Arg Lys Ala Ile Ala Glu Gly Glu Ala Glu Leu Ala Gly Ile
240   65          70          75          80
241 Cys Ser Ala Met Gly Glu Pro Pro Val His Val Arg Gln Ser Asn Gln
242          85          90          95
243 Lys Leu His Gly Leu Arg Glu Glu Leu Asn Ala Ile Val Pro Tyr Leu
244          100         105         110
245 Glu Glu Met Lys Lys Lys Lys Val Glu Arg Trp Asn Gln Phe Val His
246          115         120         125
247 Val Ile Glu Gln Ile Lys Lys Ile Ser Ser Glu Ile Arg Pro Ala Asp
248          130         135         140
249 Phe Val Pro Phe Lys Val Pro Val Asp Gln Ser Asp Leu Ser Leu Arg
250 145          150         155         160
251 Lys Leu Asp Glu Leu Thr Lys Asp Leu Glu Ser Leu Gln Lys Glu Lys
252          165         170         175
253 Ser Asp Arg Leu Lys Gln Val Ile Glu His Leu Asn Ser Leu His Ser
254          180         185         190
255 Leu Cys Glu Val Leu Gly Ile Asp Phe Lys Gln Thr Val Tyr Glu Val
256          195         200         205
257 His Pro Ser Leu Asp Glu Ala Glu Gly Ser Lys Asn Leu Ser Asn Thr
258          210         215         220
259 Thr Ile Glu Arg Leu Ala Ala Ala Asn Arg Leu Arg Glu Met Lys

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RAW SEQUENCE LISTING

DATE: 07/19/2005

PATENT APPLICATION: US/10/619,685A

TIME: 11:06:22

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| 260 | 225 | | | | 230 | | | | 235 | | | | 240 | | | |
| 261 | Ile | Gln | Arg | Met | Gln | Lys | Leu | Gln | Asp | Phe | Ala | Ser | Ser | Met | Leu | Glu |
| 262 | | | | | 245 | | | | 250 | | | | | 255 | | |
| 263 | Leu | Trp | Asn | Leu | Met | Asp | Thr | Pro | Leu | Glu | Glu | Gln | Gln | Met | Phe | Gln |
| 264 | | | | 260 | | | | | 265 | | | | | 270 | | |
| 265 | Asn | Ile | Thr | Cys | Asn | Ile | Ala | Ala | Ser | Glu | Gln | Glu | Ile | Thr | Glu | Pro |
| 266 | | | 275 | | | | | 280 | | | | | 285 | | | |
| 267 | Asn | Thr | Leu | Ser | Thr | Asp | Phe | Leu | Asn | Tyr | Val | Glu | Ser | Glu | Val | Leu |
| 268 | | 290 | | | | | 295 | | | | | 300 | | | | |
| 269 | Arg | Leu | Glu | Gln | Leu | Lys | Ala | Ser | Lys | Met | Lys | Asp | Leu | Val | Leu | Lys |
| 270 | 305 | | | | | 310 | | | | | 315 | | | | 320 | |
| 271 | Lys | Lys | Ala | Glu | Leu | Glu | Glu | His | Arg | Arg | Arg | Ala | His | Leu | Val | Gly |
| 272 | | | | 325 | | | | | 330 | | | | | 335 | | |
| 273 | Glu | Glu | Gly | Tyr | Ala | Glu | Glu | Phe | Ser | Ile | Glu | Ala | Ile | Glu | Ala | Gly |
| 274 | | | 340 | | | | | | 345 | | | | | 350 | | |
| 275 | Ala | Ile | Asp | Pro | Ser | Leu | Val | Leu | Glu | Gln | Ile | Glu | Ala | His | Ile | Ala |
| 276 | | | 355 | | | | | 360 | | | | | 365 | | | |
| 277 | Thr | Val | Lys | Glu | Glu | Ala | Phe | Ser | Arg | Lys | Asp | Ile | Leu | Glu | Lys | Val |
| 278 | | 370 | | | | | 375 | | | | | 380 | | | | |
| 279 | Glu | Arg | Trp | Gln | Asn | Ala | Cys | Glu | Glu | Glu | Ala | Trp | Leu | Glu | Asp | Tyr |
| 280 | 385 | | | | | 390 | | | | | 395 | | | | 400 | |
| 281 | Asn | Lys | Asp | Asp | Asn | Arg | Tyr | Asn | Ala | Gly | Arg | Gly | Ala | His | Leu | Thr |
| 282 | | | | 405 | | | | | | 410 | | | | 415 | | |
| 283 | Leu | Lys | Arg | Ala | Glu | Lys | Ala | Arg | Thr | Leu | Val | Asn | Lys | Ile | Pro | Gly |
| 284 | | | 420 | | | | | | 425 | | | | 430 | | | |
| 285 | Met | Val | Asp | Val | Leu | Arg | Thr | Lys | Ile | Ala | Ala | Trp | Lys | Asn | Glu | Arg |
| 286 | | | 435 | | | | | 440 | | | | | 445 | | | |
| 287 | Gly | Lys | Glu | Asp | Phe | Thr | Tyr | Asp | Gly | Val | Ser | Leu | Ser | Ser | Met | Leu |
| 288 | | 450 | | | | | 455 | | | | | 460 | | | | |
| 289 | Asp | Glu | Tyr | Met | Phe | Val | Arg | Gln | Glu | Lys | Glu | Gln | Glu | Lys | Lys | Arg |
| 290 | 465 | | | | | 470 | | | | | 475 | | | | 480 | |
| 291 | Gln | Arg | Asp | Gln | Lys | Lys | Leu | Gln | Asp | Gln | Leu | Lys | Ala | Glu | Gln | Glu |
| 292 | | | | 485 | | | | | | 490 | | | | 495 | | |
| 293 | Ala | Leu | Tyr | Gly | Ser | Lys | Pro | Ser | Pro | Ser | Lys | Pro | Leu | Ser | Thr | Lys |
| 294 | | | 500 | | | | | | 505 | | | | 510 | | | |
| 295 | Lys | Ala | Pro | Arg | His | Ser | Met | Gly | Gly | Ala | Asn | Arg | Arg | Leu | Ser | Leu |
| 296 | | | 515 | | | | | 520 | | | | | 525 | | | |
| 297 | Gly | Gly | Ala | Thr | Met | Gln | Pro | Pro | Lys | Thr | Asp | Ile | Leu | His | Ser | Lys |
| 298 | | 530 | | | | | 535 | | | | | 540 | | | | |
| 299 | Ser | Val | Arg | Ala | Ala | Lys | Lys | Thr | Glu | Glu | Ile | Gly | Thr | Leu | Ser | Pro |
| 300 | 545 | | | | | 550 | | | | | 555 | | | | 560 | |
| 301 | Ser | Ser | Ser | Arg | Gly | Leu | Asp | Ile | Ala | Gly | Leu | Pro | Ile | Lys | Lys | Leu |
| 302 | | | | 565 | | | | | | 570 | | | | 575 | | |
| 303 | Ser | Phe | Asn | Ala | Ser | Thr | Leu | Arg | Glu | Thr | Glu | Thr | Pro | Arg | Lys | Pro |
| 304 | | | 580 | | | | | | 585 | | | | 590 | | | |
| 305 | Phe | Ala | Gln | Ile | Thr | Pro | Gly | Asn | Ser | Val | Ser | Ser | Thr | Pro | Val | Arg |
| 306 | | | 595 | | | | | 600 | | | | | 605 | | | |
| 307 | Pro | Ile | Thr | Asn | Asn | Thr | Glu | Asp | Asp | Glu | Asn | Arg | Thr | Pro | Lys | Thr |
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VERIFICATION SUMMARY

DATE: 07/19/2005

PATENT APPLICATION: US/10/619,685A

TIME: 11:06:23

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Output Set: N:\CRF4\07192005\J619685A.raw

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L:11 M:270 C: Current Application Number differs, Replaced Current Application Number

L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date